

Attorney Docket No.: 47234-0003  
Application No. 10/500,841  
Amendment Dated: December 15, 2006  
Reply to Office Action Dated: June 15, 2006

## **REMARKS**

Entry of the foregoing amendments, reconsideration, and reexamination of the subject application as amended pursuant to and consistent with 37 C.F.R. § 1.111, in light of the remarks which follow, are respectfully requested.

### **1. Status of the Claims**

Claims 1-23 are pending in the application. Claims 8-22 stand withdrawn. Claims 1-7 are rejected.

Applicants note for the record that Claim 23 was submitted as a new claim in the response dated March 16, 2006. Claim 23 is now indicated as withdrawn. While the Office Action Summary indicates claim 23 as pending and withdrawn, no explanation of why the claim is withdrawn is made within the body of the Office Action. In fact, the Office Action does not refer to claim 23 whatsoever. While Applicants have canceled withdrawn claims 8-22, Applicants maintain that claim 23 is pending and under examination and request that the Office clarify its status in its next reply.

With the above amendments, claims 1, and 4-7 stand amended. Claims 2-3 and 8-22 stand canceled, and claim 24 is newly added. Support for the amendments to Claims 1, and 4-7 and new claim 24 can be found at least in the original claims, page 44, lines 15-21, Example 6, and the sequence listing.

### **2. Acknowledgement of Claim for Priority**

The Office's acknowledgement of the claim for priority is noted.

### **3. Acknowledgement of Information Disclosure Statement**

Applicants note the Office's acknowledgement of the Information Disclosure Statements filed in July, 2004, and March, 2006.

### **4. Claim Objections**

Claim 4 stands objected to because the recitation of "30% or more" is grammatically incorrect. As helpfully suggested by the Office, Applicants amend claim 4 by using the

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“greater than 30%” language. Reconsideration and withdrawal of the objection is respectfully requested.

Claim 7 stands objected to as being in improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have amended claim 7, thereby mooting the objection. Reconsideration and withdrawal of the objection is respectfully requested.

**5. Rejection Under 35 U.S.C. § 101**

Claims 1-5 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. As helpfully suggested by the Examiner, Applicants amend claim 1 to recite “an isolated peptide or protein.” Reconsideration and withdrawal of the rejection is respectfully requested.

**6. Rejection under 35 U.S.C. § 112, Second Paragraph**

Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite and vague for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have cancelled claim 3, thereby mooting the rejection. Withdrawal of the rejection is respectfully requested.

Claims 6 and 7 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and vague for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 stands rejected for the phrase “a neovascularization accellerator”. Claim 7 depends from claim 6, and therefore is rejected from depending from rejected claim 6.

Claim 7 stands free of the rejection, because as amended claim 7 depends from claim 1. Applicants traverse the rejection with regard to claim 6. Applicants assert that the phrase “neovascularization accellerator” is more than adequately set forth in the specification. *See, e.g.,* page 15, lines 13-29 and page 16, lines 1-7. Accordingly, Applicants assert the phrase is not indefinite in view of the specification, and respectfully request withdrawal of the rejection and allowance of the claims.

**7. Rejection under 35 U.S.C. § 112, First Paragraph (Written Description)**

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Claims 1-7 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Office asserts that the claims purportedly encompass a number of species in the genus that are not adequately described, because allegedly the specification only teaches the structure of a single representative species of such proteins. Office Action, page 5.

Without acquiescing as to the merit of the rejection as to unamended claim 1, Applicants have amended claim 1 to recite that “the basic amino acid cluster region contains at least an amino acid sequence of SEQ ID NO: 11.” With the amendment, there is sufficient description of the species populating the genus such that a skilled artisan at the time would have understood the meets and bounds of the claim. This particular species is discussed at least in Example 6 of the specification. Accordingly, Applicants request withdrawal of the rejection and allowance of the claims.

**8. Rejection under 35 U.S.C. § 112, First Paragraph (Enablement)**

Claims 1-7 further stand rejected, because the specification “while being enabling for a protein having neovascularization accelerating activity encoded by SEQ ID NO: 6 from human with identifying properties such as converting of N-acetylglucosamine into  $\alpha$ -6-D-mannoside using UDP-N-acetylglucosamine as substrate, specificity as defined in claim 2, optimum pH...,” the specification allegedly “does not reasonably provide enablement for any peptide or any protein having neovascularization activity from any source or any protein sequence with modification of one or more amino acids or any peptide sequence with modification of one or more amino acids to SEQ ID NO: 7.”

Applicants traverse the rejection to the extent it applies to the claims as amended. Applicants have amended claim 1 to recite that “the basic amino acid cluster region contains at least an amino acid sequence of SEQ ID NO: 11.” Without acquiescing as to the merits of the rejection, Applicants note that with the basic amino acid cluster region containing SEQ ID NO: 11, the skilled artisan at the time would have been enabled to make and use the claimed peptide/proteins and compositions comprising the same. *See, e.g.*, Examiner 6 in the specification. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of the claims.

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**9. Rejection under 35 U.S.C. § 102**

**9.1 Rejection over Taniguchi et al., (U.S. Patent No. 5,834,284)**

Claims 1-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Taniguchi et al. (U.S. Patent No. 5,834,284) [hereinafter Taniguchi I]. Taniguchi I is alleged to disclose a beta1,6-N-acetylglucosaminyl transferase protein which is 100% identical to a protein encoded by SEQ ID NO: 6 and comprises a region 100% identical to SEQ ID NO:7.

Without acquiescing as to the merits of the rejection of claims 1-7 under § 102(b), Applicants have amended claim 1, and the claims that depend there from, to recite that “the basic amino acid cluster region contains at least an amino acid sequence of SEQ ID NO: 11.” As Taniguchi I does not teach or suggest SEQ ID NO: 11, it cannot anticipate claims 1-7 as amended. Applicants respectfully request withdrawal of the rejection and allowance of the claims.

**9.2 Rejection over Taniguchi et al. (EP 0585109 A2)**

Claims 1-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Taniguchi et al. (EP 0585109 A2) [hereinafter Taniguchi II]. Taniguchi II is asserted for allegedly disclosing a beta1,6-N-acetylglucosaminyl transferase protein (SEQ ID NO: 8), which is 100% identical to a protein encoded by SEQ ID NO: 6 and comprises a region 100% identical to SEQ ID NO: 7.

Without acquiescing as to the merits of the rejection of claims 1-7 under § 102(b), Applicants have amended claim 1, and the claims that depend there from, to recite that “the basic amino acid cluster region contains at least an amino acid sequence of SEQ ID NO: 11.” As Taniguchi II does not teach or suggest SEQ ID NO: 11, it cannot anticipate claims 1-7 as amended. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of the claims.

**10. Double Patenting Rejection**

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,707,846.

Applicants submit that with the amendment to the claims, claims 1-7 are not obvious in view of claim 1 of U.S. Patent No. 5,707,846, because the ‘846 patent does not teach or

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suggest "the basic amino acid cluster region contains at least an amino acid sequence of SEQ ID NO: 11." Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-7 based on the judicially created doctrine of nonstatutory double patenting, and allowance of the claims.

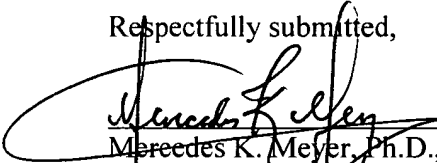
### CONCLUSION

Should the Examiner have any questions or comments regarding Applicants' amendments or response, he is asked to contact Applicants' undersigned representative at (202) 842-8821. Please direct all correspondence to the below-listed address.

In the event that the Office believes that there are fees outstanding in the above-referenced matter and for purposes of maintaining pendency of the application, the Office is authorized to charge the outstanding fees to Deposit Account No. 50-0573. The Office is likewise authorized to credit any overpayment to the same Deposit Account Number.

Date: December 15, 2006

Respectfully submitted,

  
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